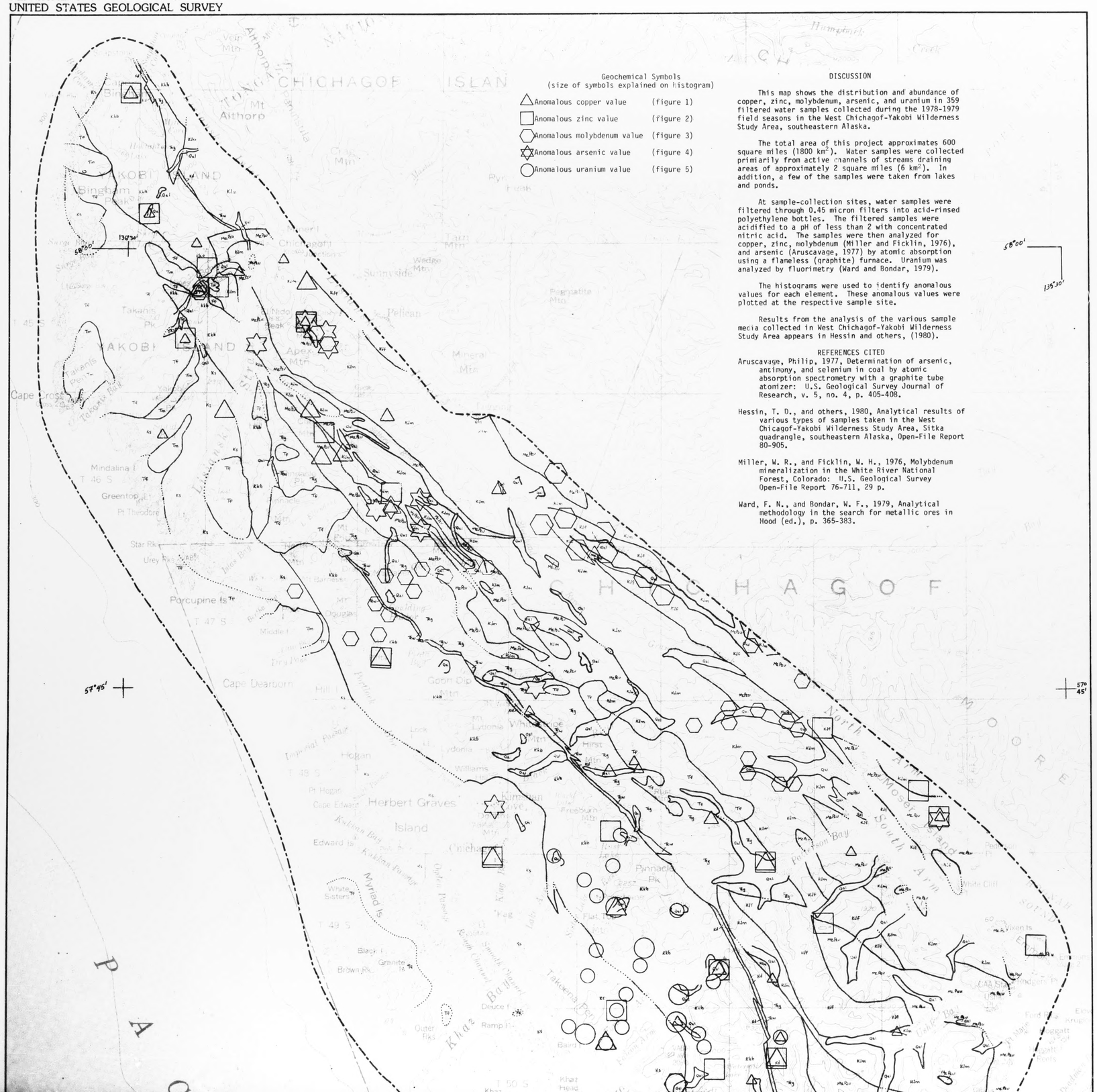
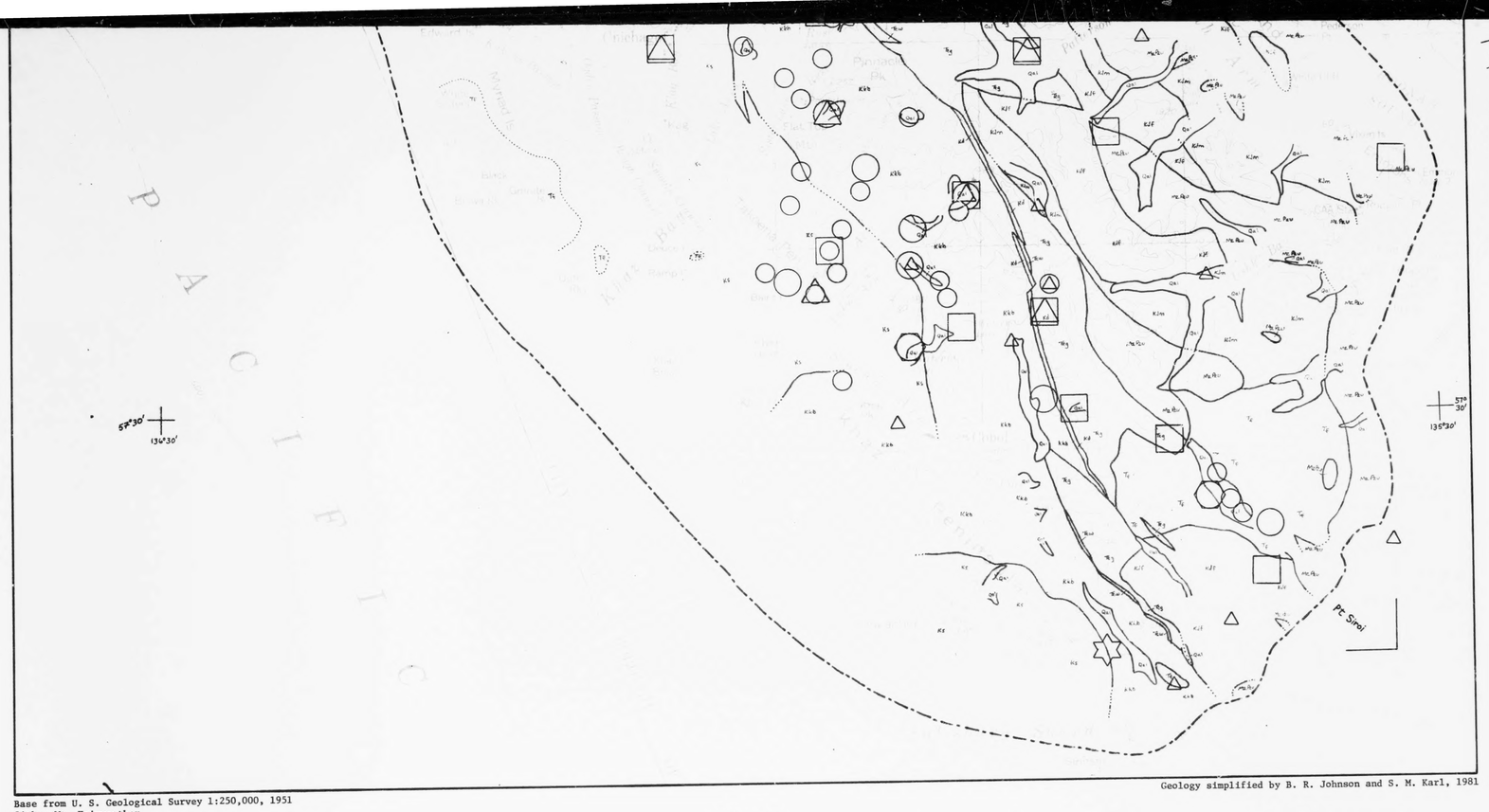
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

OPEN-FILE REPORT
81-27-N


CHICHAGOF ISLAND
YAKOBI ISLAND
Althorp
Mt Althorp
Bingham Bay
Takanis Pt
Cape Cross
Mindalina I
Greentop
Pt Theodore
Star Rk
Porcupine Is
Cape Dearborn
Herbert Graves Island
Edward Is
Myriad Is
Black I
Granite Is
Brown Rk
Deuce I
Ramp I
Outer Piks
Tokoyeta Bay
Takanis Pen
Pelican
Sunnyside
Pinnacle Pk
Pyramid Peak
Clam Mtn
Tatu Mtn
Wedge Mtn
Mineral Mtn
Apex Mtn
Hirst
Lydonia
Williams
Hogan
Pt Hogan
Cape Edward
Freeburn
Point Augusta
Kakul Bay
Kakul Passage
Kakul Narrows
Inner Kakul Passage
Kakul Rocks
Kakul Reef
Kakul Pass
Kakul Passage
Kakul Bay
Kakul Narrows



Base from U. S. Geological Survey 1:250,000, 1951
Sitka; Mt. Fairweather

Geology simplified by B. R. Johnson and S. M. Karl, 1981

SCALE 1:125 000
2 0 2 4 6 8 MILES
2 0 2 4 6 8 KILOMETERS

CORRELATION OF MAP UNITS

Qal	QUATERNARY
Tf, Tm	TERTIARY(?)
Kd	CRETACEOUS(?)
Ks	CRETACEOUS
Kkb	CRETACEOUS
KJf, KJm	CRETACEOUS AND JURASSIC
Trw	TRIASSIC(?)
Trg	TRIASSIC(?)
MzPzu	MESOZOIC AND PALEOZOIC(?)

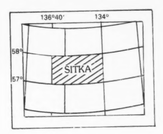
LIST OF MAP UNITS

Qal	ALLUVIAL DEPOSITS--Undivided
Tf	FELSIC PLUTONIC ROCKS--Dominantly tonalitic
Tm	MAFIC PLUTONIC ROCKS--Dominantly gabbroic
Kd	DIORITE SILL--Extensively altered
Ks	SITKA GRAYWACKE
Kkb	KELP BAY GROUP--Metasediments and metavolcanics
KJf	FELSIC PLUTONIC ROCKS--Dominantly granodiorite
KJm	MAFIC PLUTONIC ROCKS--Dominantly quartz diorite, diorite, and gabbro
Trw	WHITESTRIPE MARBLE
Trg	GOON DIP GREENSTONE
MzPzu	UNDIVIDED METASEDIMENTARY--Metavolcanic and metaplutonic rocks

Studies Related to Wilderness

The Wilderness Act (Public Law 88-577, Sept. 3, 1964) and related Acts require the U.S. Geological Survey to survey certain areas on Federal lands to determine their mineral resource potential. Results must be made available to the public and be submitted to the President and the Congress. This report presents the results of a geochemical survey of the West Chicagof-Yakobi Wilderness Study Area, Sitka quadrangle, southeastern Alaska.

QUADRANGLE LOCATION



INDEX SHOWING LOCATION OF STUDY AREA

GEOCHEMICAL MAP SHOWING THE DISTRIBUTION AND ABUNDANCE OF COPPER, ZINC, MOLYBDENUM, ARSENIC, AND URANIUM IN FILTERED WATER SAMPLES IN THE WEST CHICHAGOF-YAKOBI WILDERNESS STUDY AREA, SITKA QUADRANGLE, SOUTHEASTERN ALASKA

By

T.D. Hessin, W.K. Erverman and G.L.Crenshaw

1981

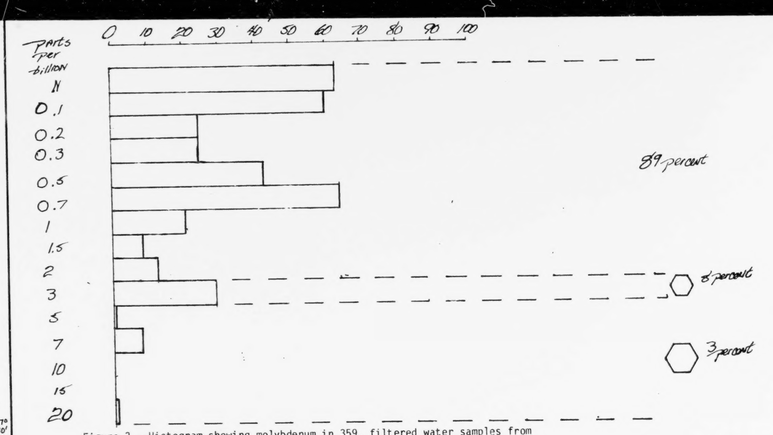


Figure 3.--Histogram showing molybdenum in 359, filtered water samples from the West Chichagof-Yakobi Wilderness Study Area. Analysis by atomic absorption using the graphite furnace, (Miller and Ficklin, 1976). Hexagons indicate anomalous concentrations and class percentages computed on total sample population.

N, not detected at limit of detection

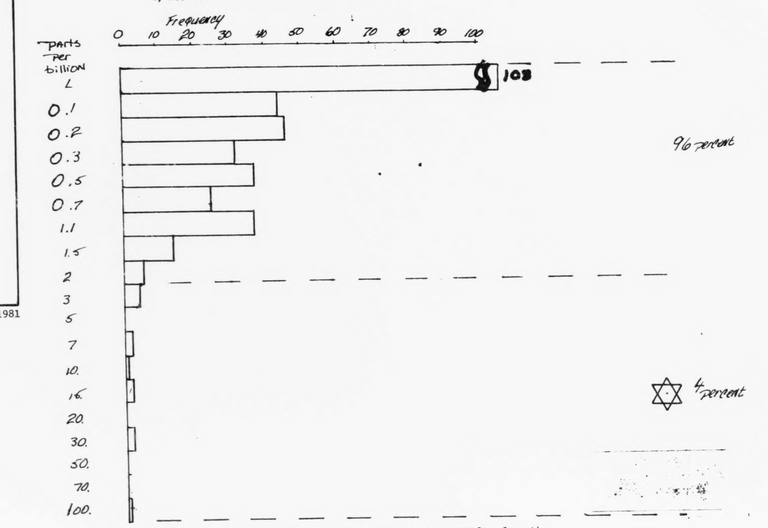


Figure 4.--Histogram showing arsenic in 359, filtered water samples from the West Chichagof-Yakobi Wilderness Study Area. Analysis by atomic absorption using the graphite furnace, (Aruscavage, 1977). The star indicates anomalous concentrations and class percentages computed on total sample population.

L, detected but below level of determination

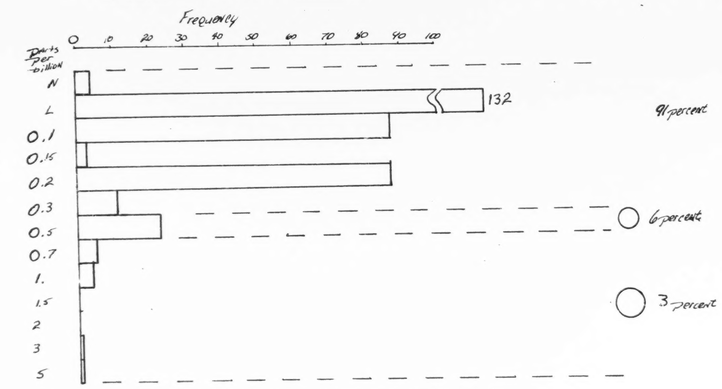


Figure 5.--Histogram showing uranium in 359, filtered water samples from the West Chichagof-Yakobi Wilderness Study Area. Analysis by fluorimetric technique, (Ward and Bondar, 1979). Circles indicate anomalous concentrations and class percentages computed on total sample population.

N, not detected at limit of detection

L, detected but below level of determination